## STATE OF NEW JERSEY AGRICULTURAL EXPERIMENT STATION WILLIAM H. MARTIN, DIRECTOR

NEW BRUNSWICK, N. J.

February 10, 1947

Mr. Joshua Lederberg Yale University Osborn Botanical Laboratory New Haven, Connecticut

Dear Mr. Lederberg:

I am in receipt of your letter of February 8 and am very much interested to learn that you would like to undertake the study of the effect of an antibiotic upon Escherichia coli. I believe that streptomycin will fulfill the requirements for the particular antibiotic since it is highly active against E. coli, I gram of the pure material containing just I million units i.e. I gm is active when diluted with I million milliliters of culture medium inoculated with a suitable strain of E. coli. A strain of an organism resistant to another antibiotic would still remain sensitive to streptomycin and vice versa.

I would suggest that you write to Merck & Co., Inc., Rahway, N.J., attention of Mr. J. C. Woodruff or to Chas. Pfizer and Co., ll Bartless Street, Brooklyn, N.J., attention of Dr. C. Kane. I am sure that they will be able to supply you with a purified preparation of streptomycin. Even the commercially available material has an activity now of more than 500,000 units per gram.

I shall be giad to help you in any way that I can. Possibly you may want to try later the effect of streptothricin which is also active against <u>E. coli</u> or even of grisein, a new antibiotic that we have recently isolated. Unfortunately, there are serious limitations to these two antibiotics. The first is not available commerically and the second allows rapid development of resistance of the organism upon which it acts.

I am sure that after you have carried out your first experiments that you will want to discuss your data with me. I shall be glad to have you come down here or possibly stop off in New Haven at some convenient time to go over these data with you.

Sincerely yours,

Selmen a. Warsman

SAW: VAB